THE AMERICAN BEE JOURNAL CIRCULATES ALL OVER THE WORLD
PUBLISHED BY THOS. G. NEWMAN & SON. CHICAGO, ILL.

THOMAS G. NEWMAN, EDITOR.

Vol. XXIV. Sept. 5, 1888. No. 36.

EDITORIAL BUZZINGS.

But still the world goes round and round,
And the genial seasons run,
And ever the right comes uppermost,
And ever is justice done!

The British Bee-Keepers' Guide Book, by our friend T. W. Cowan, has been translated into Spanish, and republished at Barcelona, Spain. It was long since translated into French. It is a good and practical work, and richly deserves its popularity.

The Two Most Skillful Architects in all the world are the bee and the spider. The one puts up neat packages of sweets, and the other builds a slaughter-house for flies. Spiders are valuable, inasmuch as they destroy noxious insects. So says an exchange.

It is an Old Proverb, but a true one, that "The Gods give us no great good without labor." It is also true that the *hardest labor* is not always that which receives the greatest pay. Bees are the *greatest workers* in the world—resting not day or night—but in six or eight weeks they die, before having enjoyed any of the results of their labors—leaving to their progeny the wealth gathered. Then comes man, and often "robs" both parent and offspring of their hoarded treasures.

Germany still mourns her heroic Emperor Frederick, and few can read without interest the well-illustrated sketch which opens *Frank Leslie's Popular Monthly* for September, tracing his whole career. The number abounds in most attractive illustrations, the frontispiece being very taking.

The Silver Lining to the clouds is now becoming apparent. White clover is now giving second bloom in some localities, and the bees are gathering more honey from it, than at any time previous during this year. Fall flowers are coming in and present an excellent prospect. Sweet clover is rather late in blooming, still it is just commencing to show its flowers and spread its perfume. Mr. O. B. Barrows, of Marshalltown, Iowa, wrote us as follows on Aug. 30, 1888:

From the time basswood bloom failed until Aug. 18, bees lost in weight until they neared starvation, with the prospect of being obliged to buy barrels of sugar to keep them from starving next winter. On the 18th they commenced gaining in weight, and some that did not swarm and were full of bees, have gained 20 pounds, and the most of them are out of the woods, so far as winter stores are concerned; and the balance will be, if this flow holds out a few days longer. We can now see the silver lining to that cloud.

Shall it be Changed?—Several have advocated the changing of the time for the payment of dues and the election of officers of the National Bee-Keepers' Union, to January instead of July. Here is what Mr. E. France has to say on the subject:

The report of the Manager of the National Bee-Keepers' Union, with voting blanks, was brought to the house by some of the boys, but I have never seen it. I wish we could change the time from what it is to Jan. 1, to make these payments; then we would have more time to attend to it, and could take time to see other bee-keepers, and very likely get some of them to join the Union. As it is, the time for renewal comes at the most hurrying time of the bee-keepers' year. For my part I would be willing to pay another dollar on Jan. 1, if the matter could be changed.

Of course it can be changed, if there are enough in favor of it. Votes count. Will every member kindly send in a vote on the subject who is in favor of the change? In that way it can be settled by amending the constitution accordingly.

A New Edition of Cook's Manual is just published, and a copy is on our desk. This is the 15th thousand of the deservedly-popular Manual of the Professor. It is largely re-written, and much elaborated, containing over 100 pages more than the former edition, besides a large number of new engravings. On this account the price has been increased to $1.50. It now contains 462 pages.

On the matter of bees injuring grapes, we find the following on page 337:

That bees ever tear the grapes is a question of which I have failed to receive any personal proof, though for years I have been carefully seeking it.....I feel very certain that bees never attack sound grapes. I judge not only from observation and inquiry, but from the habits of the bee. Bees never bore for nectar but seek, or even know only of that which is fully exposed.

We may give further extracts, as opportunity offers. It can be obtained at this office.

Not only do the bees gather the honey, but it seems that Nature intended that they should fructify the flowers, and in return for this valuable work, the flowers pay the the bees in nectar, which they carry to their homes to sustain their lives and feed their insect progeny—the *surplus* only being taken for man's use to pay him for the necessary care and protection. An exchange puts it in these words:

The usefulness of the bee is not confined to the honey she produces. Her mission is more extended. Much of the fruitfulness of our orchards must be credited to her diligent going from blossom to blossom. In the spring, when the pollen is ripe, it is shaken down by her upon the inner part of the blossom, or carried from one flower to another, thus making them fruitful. Plants which have male and female flowers on separate stalks are almost altogether dependent upon insects like the bee for fructification.

Verbena and Cone Flowers.—J. O. Todd, Richmond, Iowa, on Aug. 25, 1888, writes as follows:

I send samples of flowers on which the bees are at work very industriously. No. 1 has a blue flower and No. 2 yellow flowers. Please answer in the BEE JOURNAL.

No. 1 is *Verbena hastata*, one of the numerous vervains. It has long been recognized as a good honey-producer.

No. 2 is the cone flower (*Rudbeckia*), which is another August flower, and yields considerable honey.

A Honeyed Man.—Recently a man down in Kennebunkport, Maine, says an exchange, captured 800 bees while they were swarming in the woods. He daubed himself with honey, the bees alighted thereupon, and in this way he transported them home without receiving a sting. There is nothing strange about that—still the newspapers are passing it around as if it was a great feat.

The Langstroth photograph, that is just gotten up by Mr. Thomas B. Reynolds, of Dayton, O., is on our desk (see page 590). It is a full-length one, and shows the general appearance and pleasant face of the "grand old man" which we all have learned to love. It is full cabinet size, 4x6 inches, and we do not know how 50 cents could be spent to better advantage, than by buying this photograph—for the owner will have the unspeakable pleasure of being able to *look* into that benevolent face, and then to *feel* that he has done a meritorious act by adding to the fund which is to provide for the necessities of the closing years of a life which has been spent for the good of an industrial pursuit, and who will long be held in "blessed memory."

Why Should Not the subject of bee-keeping be taught in all of the Agricultural Colleges, if it is properly a branch of practical agriculture?

GLEANS OF NEWS.

Honey Candy.—A correspondent in the *Canadian Bee Journal* gives the following concerning sugar-ripened honey, which may interest our readers:

At our home we have had a coal-stove burning for over two months without interruption, keeping the temperature high, consequently very dry. Near the stove is a pantry with only a lath and plastered wall between.

In the pantry was a large fruit-dish containing several pounds of very fine, well-ripened honey. The dish had been setting on the shelf next to the wall for about a week, and when it was brought out the spoon was resting on the top, which was tough, and had a glassy appearance. When pressed with a spoon it seemed like a paper covering. We scratched a hole in it to ascertain the depth, and found it to be between ¼ and ½ of an inch. When placed on paper it looked like soft wax, and one would hardly believe that honey, by a hot, dry atmosphere, would evaporate its moisture and become so thick. We thought this a good opportunity to test the difference in quality and flavor; taking some of the honey from a 60-pound tin and comparing it in texture, color, and flavor with this better ripened, it did not seem the same. The contents of the tin was specially selected, and we considered it as good as could be produced; but tests go to prove that the honey in the dish was so much superior that any one comparing them would not hesitate to give 2 or 3 cents a pound more for it.

We do not know how much loss there would be in evaporating honey to that extent; but we suppose the loss to be from 10 to 20 per cent. We believe this class of honey would find a market at a price sufficent to warrant the experiment. It would be necessary to place it on very shallow vessels, and subject it to a very low temperature, that the color might not be changed.

We fancy a room properly arranged, with coils of steam-pipes to raise the temperature to a desirable height, at the same time allowing a current of air to pass through, would soon reduce our ordinary honey to the consistency of jelly. It could then be placed in tumblers, or any kind of vessel; in fact, paper bags could be manufactured of a size and shape suitable to hold it, and sold in 5, 10, 15 and 20 cent packages. It might even be sold by the penny worth, which would increase its consumption.

What is It?—The Bee-Keepers' *Review* for Aug. 10, came duly to hand, and as usual is very interesting. On Wiley's confession, the editor remarks thus:

Prof. W. A. Wiley has received so vigorous a trouncing from the bee-journals, particularly from the AMERICAN BEE JOURNAL, that he has at last forsaken his dignified silence, and attempted—well, it is hard to say what. It is a mixture of defense, explanation and confession, in which the contradictions and inconsistencies are pitiably ludicrous. It seems that he lacks the manhood to come right out and own up without any quibble, and do what he can to repair the damage he has done. Such confessions as he has already made awaken only contempt and disgust.

And it may be also stated that he would never have departed from his rule of "dignified silence" but for the editorial rocks hurled at him by the AMERICAN BEE JOURNAL!

"Worthless Drones in the hive of Nature!" How often we hear that sentence applied to lazy men. We are usually inclined to dispute the matter because the drone bees are not a *worthless set*—they have duties to perform, and are useful in the line designed by Nature. But here is a little story, told by Anna B. Quillin, of Ipara, Wis., in *Gleanings*, which will be read with interest:

One morning, a year or more ago, my little friend Max came in to see me; and as he walked across the room I noticed that he held both his hands behind him. As he approached my couch he explained, "I've got something for you—just hear them sing!" and suddenly, before I realized what he was going to do, he was holding his hands up by my ears. And, oh such a *buzz, b-u-z-z, b-u-z-z-i-n-g* as I heard! I felt as though a whole swarm of bees had surrounded me. Glancing up at him I saw his eyes were twinkling, and he was shaking with suppressed laughter as he watched my astonished countenance.

"O Max!" I said, "are your hands full of bees, or what have you got in there? It sounds like a swarm of bees."

"Just five bumble-bees," he replied, "but they can't hurt you, for they are nothing but drones."

"But, where did you get them, and how did you know they were 'nothing but drones?'" I questioned.

"Why, 'cause I found them on that old dead tree in the lane!" he replied.

"But, Max," said I, "how could that tell you they were drones?"

"Ho! he said. "don't *you* know how to tell a drone? Why, I'll tell you how you can tell them every time! The workers are too busy to lounge around and do nothing; and when they alight it is always on something they can work on; and when you see bees sitting around on dead wood, with nothing to do, you may be sure they are old lazy drones. Why, I have caught *dozens* of them, and they are *always* drones. I never caught a worker that wasn't at work, or else looking out for a job."

"Well, Max, that is a new idea to me," I said; "but if that is the case, the bees are very much like people, aren't they? For a man who spends his time sitting around on old store-boxes, and lounging about saloons is generally a drone in the human hive. Our workers in the world haven't much time to waste, for they can always find plenty to do, and take pleasure in being useful."

Sometime Ago items were going the rounds of the press, showing that bees were storm warners. Now, they are barometers which warn the denizens of Australia of coming hot weather. A Melbourne correspondent of the Dundas *Advertiser* narrates what he considers an interesting proof of this provident and far-seeing instinct of bees!

Turning from men to insects, a singular circumstance is reported from a hot, dry valley in New South Wales. Last year the drouth there was of long duration, and the denizens of the apiaries suffered much from it. This year the bees have made provision against a similar emergency. They have filled a large number of external cells in every hive with pure water instead of honey. It is thought that instinct leads them to anticipate a hot summer.

New Subscribers can obtain the full numbers for 1887 and 1888, for $1.75, while there are any sets of 1887 left.

Seasonable Hints.—The following remarks about seasonable apiarian operations, is from the *American Agriculturist* for September. It is time now to be making calculations on the necessary work before us:

It is of vital importance that every colony of bees should have a thorough inspection at the end of the honey season. It would be very exceptional if some colonies were not found queenless, and robbing is sure to follow. Parent colonies that have cast swarms are generally the ones found wanting in this respect, and if attention is not given at the close of the honey-flow, the bees will get the start.

When the flow ceases, the bees with their powerful force of idlers hunt up and rob such defective colonies. It matters little whether such queenless colonies are weak or strong, they will not defend their stores. The mischief does not stop here; when robbing bees become aroused they will overpower and destroy colonies that may be in proper condition. It is of the utmost importance to see that every colony has a good fertile queen at this season.

The reason why colonies having cast swarms are often found queenless is, that at the time of maturing, they have but the one young queen; they have no brood to fall back upon, if the young queen becomes lost, when she issues alone into the open world to receive fertilization, surrounded by myriads of enemies. In returning she sometimes enters the wrong colony.

September is the proper month to feed all colonies that may lack in food, for winter bees cannot be fed successfully during freezing weather, and if fed early, they seal the honey over. Unsealed honey in the combs near the bees during cold weather becomes diluted with the moisture from them, and is unhealthful.

Caring for, handling and disposing of the honey crop also demand our attention during the latter part of the season. It has been too common to ship honey to distant markets at a low figure. No one can as successfully build up a demand for honey as the apiarist himself, and the business is far safer in his hands than in any other. The place to commence operations is at home, where we have the entire care and control of the matter. Several thousands of pounds of honey may be disposed of in almost any locality with much greater profits than by shipping. Build up a home market, and never drive business away that can be transacted at home.

A Lady, writing about small fruit and flowers in the *Indiana Farmer*, concludes thus:

We are largely creatures of education, and if we were educated to look upon the honey-producing weeds as something useful, would they not cease to be such an eye-sore to the farmer as well as the passerby? Suppose the seeds from the fence-corners do get scattered over the field; it will only take more culture to keep out of growing crops, and most people will admit that they can hardly have too much culture. I think the beautiful asters and golden-rods are an ornament to the fence corners. But, advancement in knowledge usually makes us equal to any emergency, and what we have lost in the destruction of weeds and forest trees, may be regained in the cultivation of plants, etc., which will not only furnish our tables with delicious fruits, but also the where-withal to sweeten them.

The culture of small fruits furnishes an abundant supply of bee-food, and where there are small fruits there ought to be bees to help fertilize the flowers, and so make them more productive.

The Crop and Honey Market.—In the San Francisco *Chronicle* we find a recent article on the crop of honey, and the market values of the product from which we extract the following:

Reports from all over the State are to the effect that the honey crop is so short that it is no exaggeration to say that it is a total failure. There is hardly an apiary in any of the hitherto most prominent bee-keeping counties of the State which has this year produced surplus honey enough to pay interest on the capital invested therein. The same reports come from the East, and never since the care of bees attained the proportions of a regular industry has the honey yield of the United States been so limited as in the season now closing.

In conjunction with the limited output, however, has come a marked rise in prices, but these comparatively high figures are after all of little value to the bee-keeper, for of what use would it be to him were honey to be quoted at even a dollar a pound if his bees produced no surplus for sale?

The experience of the present season is, after all, only a repetition, on a more extended scale, of what has been the uniform history of the industry ever since the first colonies of bees were brought around by the isthmus and sold here for $200 apiece. First there has come a succession of good seasons; the stock of bees has largely increased; the price of honey has gradually lowered, and finally many have gone out of the business in disgust.

Then a bad season has come, or a succession of them; there have been no wild flowers, or the natural bloom has not contained the usual amount of nectar; the honey crop has been short; prices have risen, and a few, who were located in exceptionally favorable regions, have made large profits.

This has stimulated others to go into the business, and the result has been another period of heavy production, low prices and small profit. For those who have been able to secure anything like a fair crop, the present season will be a bonanza. And those who have been sufficiently far-sighted to provide their bees with an abundance of forage, without placing any dependence upon the natural bloom, will this season reap a good reward for their enterprise.

Those who have taken this precaution are few enough by the side of the many who are accustomed to "trust to luck;" but this lends emphasis to the general proposition that the bee-keeper who treats his colonies precisely as he would any other kind of animals upon which he placed dependence for an income, and sees that provision is made for a bad season, will come out ahead in the long run, while the one who trusts to nature will run behind.

The St. Louis Fair opens Monday, Oct. 1, and closes Saturday, Oct. 6. Seventy thousand dollars is offered in premiums. On Tuesday, Oct. 2, the grand annual nocturnal pageant of the Veiled Prophets will be given. The streets of the city will be illuminated by 500,000 gas jets, thus presenting one of the most realistic sights imaginable.

All railroad and steamboat companies have made a rate of one fare for the round trip, during the entire week.

Any of our subscribers desiring a copy of the Premium List will receive one free by addressing Arthur Uhl, Secretary, 718 Chestnut Street, St. Louis, Mo.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

Work in Surplus Stories.—Many letters are received from beginners asking why their bees do not work in the surplus story. A correspondent in the *Prairie Farmer* asked a similar question, and Mrs. L. Harrison answered it in this manner:

Bees would work in your surplus sections if they had anything to work with; they cannot make bricks without straw, or, in other words, cannot secrete wax and store honey when there is none to gather in the fields. The honey-flow has been very little last year and this, with few exceptional days. Let there be a flow of honey, and your surplus sections would soon be full of bees, hanging in webs, secreting wax to build comb, and loaded bees would drop at the entrance. This season they get just honey enough to keep them breeding, and the queen is not crowded for room to deposit her eggs. I looked into a hive to-day where bees had been hived in a hive full of combs. There was brood in all the combs, but not one cell of honey stored above it, as is their usual way of doing. If there should be no honey at all for a few days, these bees must starve, if not fed. All the surplus stored in our apiary this season is where two or three swarms clustered together and were put into a hive full of comb, and surplus boxes put right on to give them room, during the blooming of the linden.

I have heard of but one apiary in Illinois where there has been any surplus stored, up to Aug. 14. This one is located on the Illinois river bottom on the east side, and is surrounded with a great deal of low, swampy ground. The proprietor claims that the east side of the river is better for an apiary than the west side, as many bees are lost in the river while crossing it, on the approach of storms from the south and west; and the bee-pasture is better on the east side, as there is more low land. An apiary located opposite to him on the west side has no surplus, while he has secured 1,500 pounds from 50 colonies, spring count.

Well Expressed.—The *Rural Home*, an influential farm paper, thus notices the National Bee-Keepers' Union, and the work being done by it, through the pen of a valued correspondent:

Again the Manager of the Bee-Keepers' Union is out with his yearly report. This report shows that the Union has been successful in every case that it has undertaken to defend, and it is hoped that the ignorance and petty jealousy which prompts certain individuals to make war on the little busy bee, which is of much benefit to the farmer and fruit-grower, by way of the fertilizing of nearly all fruits and seeds, will cease.

Ignorance, only can accuse the bees of eating *peaches* and *young ducks*, as in the case of the Arkadelphia, Ark., suit, which has been in court for the past six months, and has caused one of our best bee-keepers much trouble, besides fines and imprisonment. The whole thing seems to have come out of the jealousy of a few individuals, and the Mayor of that city.

The Manager of the Union deserves great credit, in that he does not undertake to defend any bee-keeper who has not done all in his power to keep peace between his bees and their neighbors.

The *Rural Home* and its correspondent have the thanks of the Manager for these kind words. Peace is his ardent desire, even if he is compelled to *fight* for it!

Scatter the Leaflets.—Look at the list (with prices) on the second page.

Pure Bees are the Best.—On this subject a correspondent of the *Bee-Keepers' Magazine* says:

The honey-bee has been known—if history is correct—for many centuries; the traditions of the Bible show its great antiquity more strongly than does any other historical work, so we can safely assume that the apis is as old as man himself. When, however, we come to the question of which of the present known races was the original, or whether either of them was, for that matter, we are wholly in the dark. As well might we assume that the one or the other was the original race, and we may do so with impunity, as no one can bring forward any proofs to the contrary.

I do not propose now to attempt to prove an impossibility, or to assert anything as to priority, the question with me being simply, "Shall we receive greater benefits from keeping our Italians pure than by crossing them?" I claim, in answer, that we shall, and do, and offer the records of the past in proof of the correctness of that answer, while at the same time I will give my own experience during over twenty years past as a bee-keeper, in comparing the Italian and black and their crosses; as evidence to the same point.

Conventions.—The time for holding Bee-Keepers' Conventions has now arrived, and we cannot give any better advice than this: Let each one attend who can do so, and take part in making these meetings interesting and instructive. If you have not already obtained the "Bee-Keeper's Convention Hand-Book," do so at once to post yourself up on how to conduct such meetings correctly. It contains a simple Manual of Parliamentary Law and Rules of Order for the guidance of officers and members of Local Conventions—Model Constitution and By-Laws for a Local Society—Programme for a Convention, with Subjects for Discussion—List of Premiums for Fairs, etc. Bound in cloth, and suitable for the pocket. Price, 50 cents. We will club this book and the AMERICAN BEE JOURNAL for one year for $1.25. It also contains a lot of blank leaves on which you can note important matters as they come up. Do not fail to send for a copy of it.

We Want 20,000 subscribers. Out of the 300,000 bee-keepers in America, certainly this is not an extravagant desire! It is only one out of every fifteen! We confidently ask those who appreciate the AMERICAN BEE JOURNAL, to show it by sending us one or more new subscribers. We will give them full value for their money.

A Modern BEE-FARM, and its Economic Management; showing how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man. By S. Simmins. For sale at this office. Price, $1, postpaid.

Give a Copy of "Honey as Food and Medicine" to every one who buys a package of honey. It will sell lots of it.

QUERIES AND REPLIES.

Amount of Honey for Surplus and Brood-Rearing.

Written for the American Bee Journal

Query 572.—What proportion of the honey gathered from a "field" goes to rearing brood, and what part for surplus, on an average?—Michigan.

I do not know.—P. L. VIALLON.

I do not know.—H. D. CUTTING.

I do not know.—MRS. L. HARRISON.

All answers are guess-work, and much depends, at that.—J. P. H. BROWN.

I doubt whether any one knows. I am sure I do not.—M. MAHIN.

I do not know how to get at it.—J. M. HAMBAUGH.

That is hard to tell. I have not a well-defined idea on the subject.—EUGENE SECOR.

I can only guess. In an average season at least one-half is consumed in brood-rearing, and perhaps more.—C. H. DIBBERN.

In an average season, taking the year through, I "guess" the bees require two-thirds of the amount gathered.—R. L. TAYLOR.

I put it at about 9 to 10, this season; and about 2 to 1 in a good season.—J. O. SHEARMAN.

At a very rough guess, one-third for brood, one-third for support of old bees, and one-third for surplus.—C. C. MILLER.

From the way I have seen brood-rearing use up honey, I should say that more honey was consumed, one year with another, by the bees and their young, than by the owner and his customers.—JAMES HEDDON.

That is too hard a nut to crack. We should judge, however, than on an average three-fourths of the honey harvested is used up by the bees.—DADANT & SON.

This is a theoretical question that I am not only unable to answer, but give a guess even. I doubt if any one can give an answer that will be of value, owing to difficulty of obtaining data on which to base it.—J. E. POND.

I should say that in a good season about one-half of the honey goes to feed the brood. Such a season as this, 100 per cent. is thus used.—A. J. COOK.

It takes at least 60 pounds of good, thick honey to carry a colony one year. If more is obtained, we get a surplus; if less, we must feed. All depends upon the season, etc.—G. M. DOOLITTLE.

I do not know. Last year my bees gathered enough to last until they gathered last spring; but this year they lived from "hand to mouth" till sweet clover yielded honey.—A. B. MASON.

It depends entirely upon the management. A well-managed colony puts about 50 per cent. of the gather in the supers; about 30 per cent. for brood-rearing, and about 20 per cent. for winter stores.—J. M. SHUCK.

This is a hard question to answer, as there is really no uniformity as a basis on which to form an opinion. Bees will consume more or less honey, as they can or cannot get it. Some observations have led me to believe that a good, strong colony will consume at least 100 pounds of honey in a year, if they can get it; and they will get along with much less if they are compelled to do so. On an average of years, I have calculated that a colony of bees can furnish *one pound* of surplus against every pound they consume; but there is no certainty about it. This season only the very best colonies can gather enough honey to live on.—G. W. DEMAREE.

The answer can only be guess-work, and hence very indefinite. It is impossible to give an answer "on an average." It does not average. If there is only enough honey gathered for brood-rearing and food for the old bees, they take it all. If there is not enough for these, then the one or the other goes short. In any case, the apiarist gets no surplus until these necessities are provided for. In such a season as the present one, the amount used by the bees being barely provided for by Nature, the season and the honey-gatherers, the apiarist gets no surplus, or only what small amount may become a "surplus." In an ordinary season of plenty, perhaps it may be a tolerably good guess to say that the old bees consume one-third, and brood-rearing another third—leaving the remaining one-third for surplus, provided that more than 60 or 80 pounds of honey is gathered during the season, as it would certainly take that amount for the necessities of the bees, including the supply needed for the coming winter.—THE EDITOR.

Plan for a Bee-Cellar.

Written for the American Bee Journal

Query 573.—I am contemplating building a cellar for wintering bees in, and have settled on this one: I have a dry and somewhat steep bank, into which I propose to dig 20 feet in length, and 12 feet in width, and then dig a ditch 2 feet deep all around the outside, filling it with small stones, and then build a close wall 8 feet high. On the inside of the wall I will board it up, leaving a space of 4 inches or more all around to be filled with sawdust, and bank up the whole thing, all but the door, making it perfectly dark. On top of this, I propose to build a shop for the purpose of making hives and storing honey, etc. 1. Will such a bee-cellar do? 2. How many colonies will it winter? 3. What about the shop overhead?—New York.

1. It will. 2. About 100 colonies. 3. The shop would be objectionable if there is much machinery run by power.—J. P. H. BROWN.

Having never wintered bees except on the summer stands, I am unable to answer from experience.—J. E. POND.

1, Yes. 2. It depends upon the size of the hives, but it ought to contain 150. 3. It is O K.—DADANT & SON.

Yes, if it preserves the proper temperature from 38° to 45°, Fahr., as I think it would. 2. As many as desired—200 or 300 colonies. 3. The shop is all right.—A. J. COOK.

1. I should think so. 2. That will depend upon the size of the hive and the ventilation given. 3. It will do no harm.—MRS. L. HARRISON.

1. I should hestitate about putting in the sawdust. It will soon be rotten, will it not? Why is it not all right without it? 2. Probably 100. 3. It is no objection.—EUGENE SECOR.

1. Yes, if the banking up is sufficient in amount to exclude frost. 2. From 200 to 300. 3. It is all right, but pack the floor between it and the cellar with 5 or 6 inches of sawdust, to keep the frost out of the cellar.—R. L. TAYLOR.

Such a bee-cellar is all right, but if much pounding is to be done in the shop overhead, I should prefer it elsewhere in winter.—C. H. DIBBERN.

1. Yes. 2. As many as you can put into it. 3. If the hives do not touch the floor, all the noise you can make overhead will do no harm.—J. M. HAMBAUGH.

1. I think so; but you will be safe to go by Doolittle's answer. 2. Perhaps 150 to 200. 3. Lath and plaster the cellar overhead, and I think the shop will not trouble.—C. C. MILLER.

1. Yes. 2. No one can tell you how many colonies it will winter, but it will hold 150 colonies if you build it deep enough. 3. I do not like the shop overhead. I should prefer a separate building. Your cellar will make a good place to do all of your summer work in.—H. D. CUTTING.

1. It will work well. 2. All you can get in. 3. The shop will do no harm if the hives rest on the cellar-bottom, and the protection is thick enough between the two floors so that no frost gets through to the cellar.—G. M. DOOLITTLE.

1. There is nothing to hinder it from answering every purpose. 2. It would depend upon how the hives were placed in the cellar. 3. If the joist are well "bridged," I do not believe that the shop will interfere with the bees.—G. W. DEMAREE.

1. I think you will have a good cellar. 2. The number of hives the cellar will hold depends upon their size, and the closeness with which they are packed. 3. The shop overhead will do no harm if no machinery is used, provided the hives in the cellar do not touch any part of the building.—J. M. SHUCK.

1. I see no objection to it, except that the sawdust may gather too much dampness. I would prefer a 4-inch dead-air space. 2. I can make no estimate of the number of colonies that may be wintered without knowing the size and form of the hives. 3. The shop will do no harm.—M. MAHIN.

1. Such a cellar might do, but the sawdust will become damp and rot, and unless the shop is kept warm, the cellar will get pretty cold sometimes, unless there is a double floor, and filled between. 2. That will depend upon the size of the hives, and how they are put in. Do a little figuring and you will know. 3. Some say that disturbing the bees in winter does no harm; but I *know* that it harms mine.—A. B. MASON.

1. Yes, it will do about as well as any repository does. 2. I would say anywhere from 100 to 200, ventilating accordingly. 3. I should rather not pound or make any big noise or jars over the repository. Of course you want the floor filled with sawdust unless you keep a fire in it nearly all the time. You do anyway.—JAMES HEDDON.

1. Yes. 2. All that you can comfortably get into it, providing the ventilation is sufficient. 3. As the hives will rest on the bottom of the cellar, "the shop overhead" cannot disturb the bees. If they do not touch the sides of the building, they could not feel any vibration, even if "power" is used.—THE EDITOR.

CORRESPONDENCE.

LEGISLATION.

Which Shall it be Hereafter, Legislation or Litigation?

Written for the American Bee Journal

BY DR. C. C. MILLER.

In a recent number of the AMERICAN BEE JOURNAL, the editor refers to me a question which lack of time has prevented me from noticing earlier. It is a question as to what is to be done by one who is likely to be hindered in the prosecution of bee-keeping for lack of the full and free swing that most of us enjoy. This opens up a subject which I had considered laid on the shelf, and which I should not again open but for the implied wish of the editor, and the —as it seems to me—very great importance of the subject. Without considering the particular circumstances attaching to any one case, it will be sufficient to consider the ground in general.

I hardly know the best approach to make. True, I might present only such phases of the matter as are entirely new, and thus avoid awakening prejudice; but I am not sure that such a course would be entirely frank and open. Besides, I think the sober second thought of many, makes them coincide with my own views.

I may say, then, that the remedy lies in awakening in the minds of bee-keepers, a sense of the real need of taking such steps as shall result in putting their business on a footing as secure as that of others. At least some are awake to the necessity for some action, as evidenced by their becoming members of the "Bee-Keepers' Union." That this Union has accomplished good, perhaps no one will deny. Wisely conducted in the future as it has been in the past, the necessity for its existence may not cease for a long time to come, for all that the old rule holds good, that "An ounce of prevention is worth a pound of cure."

Take the case of Mr. Z. A. Clark, that has justly excited so much interest. Is it not possible that the same amount of effort, with possibly a less expenditure of money, would have secured such statutes as to have made bee-keepers safe from annoyance, not only in Arkadelphia, but throughout the entire State? When the matter is fairly understood, litigation will certainly not be preferred to legislation.

So far, the only legislation attempted, relating at all to bee-keepers, if I am not mistaken, has been, not that instigated by themselves, but, like that in Michigan, such as went directly contrary to their interests. In the uncertainty which attends such things, have we any security that when next attempted, as it may be, in some other State, it may not succeed? Although it failed in Michigan, the leading bee-keepers in that State considered the danger so great as to need their most active opposition. Please look at the matter clearly.

As it now stands, any wily schemer, for the sake of gratifying some petty spite, may secure the passage of a law injurious to bee-keeping interests. We are likely to have legislation, for that which has been attempted is likely, under the same circumstances, to be attempted again. Is it not better for us to take the initiative, and secure such legislation in advance as shall best subserve the interests, not only of bee-keepers, but of the public at large? In other words, will it not be better and easier to labor for good legislation than to labor against bad legislation after it is effected? In the one case, we have a fair field, for in most cases, at least prejudice is not aroused, as it is when some case of strife occurs.

It is a hopeful sign that some are beginning to consider what is the best legislation needed, and devising plans for the same. To that part of the subject I have given very little attention. I am hardly competent to decide what laws are needed, and it is hardly worth while to give very much attention to it, so long as the mass of bee-keepers are not awake to the importance of doing *anything*. The number of members in the "Bee-Keepers' Union" shows that. However liberal they may be in their desire to have every one a bee-keeper, and in wanting nothing done that may in any way prevent it at any time and in any place, they are nevertheless by no means liberal in helping to sustain them in the ranks after they get them there. To those, however, who are interested enough to join the Union, I respectfully submit whether it is not cheaper and better to have legislation than litigation.

Worker-Brood in Drone-Cells.

In reply to a query in a recent number of the AMERICAN BEE JOURNAL, one of the correspondents seems somewhat to call in question the possibility of workers being reared in drone cells. Although I may have seen more than one case, there is one case which I distinctly recall. In 1876, Mr. R. R. Murphy sent to the AMERICAN BEE JOURNAL "a piece of drone-comb with worker-brood in." It was reported on page 250 of Vol. XII. This remark was made by the editor: "This was a very clear case. Cells four to the inch, flat caps, out of which hatched nice young workers." There was no mistake in the case. Mr. Murphy was too experienced to be deceived, and besides, as I was living in Chicago at the time, friend Newman handed the comb to me, and I saw the workers hatch out of it, with my own eyes.

It is not a very uncommon thing to see drone-cells where drone-comb abounds, having the mouths of the cells contracted by a heavy rim of wax. Is it not likely that in such cases the bees conclude there is an unnecessary amount of drone-comb, and that after being thus contracted these cells are to all intents and purposes worker-cells?

Marengo, Ills.

APIARY WORK.

Honey Shower, Balled Queen, Giving Frames of Brood, etc.

Written for the Prairie Farmer

BY MRS. L. HARRISON.

There was a shower of honey in this locality from the basswood; something unusual, but like a thunder-shower, heavy and soon over. Those colonies that were in good condition—had their dishes right side up to catch it—are no longer poor, but rich in choice stores.

The change from poverty to riches was so sudden, that the bees had not wax scales secreted with which to build comb, but filled every empty cell. In order to have a share of this sweetness, as it were to take toll, I extracted combs where there were no brood before it was sealed. It was of course unripe, but sufficiently evaporated, and I put it out in the sun to boil, with the thermometer playing around the hundred. What I have is in vessels of tin or glass, with cheese-cloth tied over the top to keep out insects, and allow the moisture to pass off. When it is sufficiently ripened, it can be stored away, and will keep for all time free from souring.

Balling the Queen.

In looking after a swarm that had just issued, I found the queen balled in front of a hive near by. Now in releasing a queen thus balled, if the bees are picked off she is apt to be stung to death in the operation, but when the ball is thrown into water, then every fellow is for himself. Life-preservation is the first law of nature, and the queen is no longer thought of, and when the queen is released she can be taken from the water and secured. When I threw this ball into the water the bees swam away from her, but the poor thing was already dead.

I see it stated by a late writer, that when a queen gets separated from her colony, she returns to the place from where she went forth on her bridal tour. If this is so, it accounts for the reason why queens are so often found at the entrance of other colonies. When this swarm missed its queen its returned sad and disconsolate to its former home; no more swarming now until another queen can be reared. I shall watch this colony with interest.

In nine days all queen-cells are removed but one, so there will be no further swarming. Managing in this way, the colony is kept very strong during the honey flow, to gather surplus honey, and will go into winter quarters with a young, vigorous queen. Where no increase is desired, this is certainly a good way to do.

Giving Frames of Brood.

There has been much rain of late, and it is reasonable to expect a fair flow of honey. In order to profit by it, bees must be in good condition to gather it. After the hurry of swarming is over, it is well to look after the colonies that have cast swarms. I have sometimes found such hives to be almost entirely filled with honey, and a handful of bees with a laying queen, and a small patch of brood. I would take all the combs free from brood, and extract them, confining the bees with their brood to one side of their hive by a division-board. Then I would open a large colony, and take out a frame of sealed brood, brush off the bees, and give it to the little colony, placing one of the empty combs in its place. When enough of the young bees had emerged to cover the comb given to the small colony, I would give it another in the same way, and in about ten days it would be a strong colony, fully equipped for business. If it had been left alone, it would have perished the following winter, although surrounded with honey, having too few bees to keep up the necessary warmth. It is sometimes also a benefit to large colonies to have a frame which is partially filled with brood removed, and an empty comb put in its place, for I have seen every cell in such filled with brood. But if a frame filled with brood and honey is removed from a strong colony, and an empty frame put in its place, it will almost surely be filled with drone-brood.

Bees Clustering Outside of the Hive.

I do not desire more than one swarm from a colony, but if I am very busy, they get beyond my control. If I see a "cast," I cut out the queen-cells and return it, or a "maiden," which, by the way, is a swarm that casts one.

No bee-master allows his bees to cluster on the outside of a hive for want of storage room. And the farmer who waits until after harvest before he gets time to put on surplus boxes, may go without honey on his cakes another winter. When the combs are built out white, is a good time to put on receptacles for honey. What kind these should be, depends largely upon the way it is to be disposed of. Bees will, no doubt, build as much in starch boxes as in the whitest sections, but there will be a great difference in the returns, if it is to be marketed. City trade demands one and two pound sections. These can be bought by the thousand cheaply, and any child can put them together, and the cases to hold them. York State bee-keepers put one-pound sections for market into paper boxes, with highly colored lithographs on them, but our Western consumers do not demand all this "fuss and feathers."

Peoria, Ills.

The Prodigal—that Didn't Return.

Written for the American Bee Journal

BY EUGENE SECOR.

A silly bee got on a spree,
Out in a field of clover.
"I'll drink," said she, "my fill, te-he,
And play the merry rover."

"Now what's the use to be a goose,
And all the time be giving,
When life is short and made for sport,
And all we get's a living?"

"So I for one will have some fun,
And live a life of pleasure.
Who said I ought to work for naught,
And carry home the treasure?"

The day was fair. The balmy air
Played gently with the flowers.
By some strange *spell*, sweet hydromel
Distilled in nect'rous showers.

She frisked about, now in, now out,
From every flow'ret drinking;
Played in the sun till day was done
With no thought worth the thinking.

When night drew nigh she heaved a sigh,
Half sorry for her folly;
But stubborn Pride, that purblind guide,
Soon banished melancholy.

Just underneath a plantain leaf
Retired she in the gloaming.
A nimble toad spied her abode;
A wink—she ceased her roaming.

Forest City, Iowa.

GOOD REPORT.

Steady Honey-Flow—Queen-Excluding Honey-Boards.

Written for the American Bee Journal

BY H. O. KRUSCHKE.

I thought that I would throw a little bright sunshine in among so many dark reports. I am having a great honey season; not as much per colony as is often reported, for I never look for more than one-half as much—when I get that I rejoice. We never look for surplus till after July 1, or basswood bloom, and this was after July 10 this year. From then on it has been a continuous flow, not in torrents, but a steady gain.

My best colony has 140 one-pound sections full; and some are sealing 40, 50, and 70 pounds each. I tiered-up some for extracting three full stories high. They had brood in all the stories, and some of them have a bushel basket full of bees. I took off the boxes yesterday, and left them on the hives till I went through the apiary, but no robber bees appeared. I could not coax them to lick out the comb-carriers. This will continue for ten days or two weeks, if no frost appears. If I had white clover I would be in a regular "Eden."

I have never used queen-excluding honey-boards, but I have yet to find the first bit of pollen or brood in the sections. Large hives is the remedy. I had 38 colonies in good condition in the middle of May, and I have increased them to 58, and stocked the woods for miles around with runaway swarms; but they will soon wish they had stayed at home, when Jack Frost lets the mercury down out of sight. It looks now as if I would have 3,000 pounds of surplus, one-half of it comb honey in sections, and the rest extracted.

My apiary is 18 miles away, and my cranberries require a great deal of attention, so that I cannot plan very scientific management for the bees, but I do the best I can for them. The result is perfectly satisfactory.

Duester, Wis., Aug. 28, 1888.

ON THE SCALES.

Testing the Storing Qualities of the Bees for Years.

Written for the Farmer and Dairyman

BY D. KAUFFMAN.

I have had one of the best colonies in my apiary on a scale during the last six years, and in 1886 I marked down the amount gained for the day every night, and also kept a close watch on the amount of surplus honey stored, and from this I found that when bees gain from one to three pounds, about one-quarter of the gain is stored as surplus honey, and when the gain is from 3 to 8 pounds, about one-half is stored as surplus honey, and from the record kept for this season, about two-thirds was stored as surplus honey. These experiments were all made for extracted honey.

But it seems to me that the rearing of brood would not have anything to do with the gain of a colony of bees, for if the bees did not feed the brood it would not gain in weight, and if they take the feed from within the hive, it would not get any heavier on account of the brood; but it would make a difference in the amount of surplus honey stored, and when bees gain from 10 to 16 pounds per day they will lose from 3 to 5 pounds during the night; and should the next two or three days be cool or rainy, so that the bees could not fly, the bees would lose about 3 pounds in the first 24 hours, 2 pounds in the second, 1 pound in the third, and ½ pound in the fourth day.

This loss is caused by the evaporation of the honey, and I think it is nearly as great when bees gather honey as it is when they do not, so that this would make the actual weight carried in by the bees during one day from 3 to 5 pounds more than the scales would show by weighing the hive in the morning and again in the evening; and I believe that when bees gain at such rates the old ones wear out as fast as the young ones come on, for they fill up the brood-combs with honey as fast as the young bees hatch, so that the queen will not be able to find any empty cells to put any eggs in, especially when running for comb honey.

I believe there were one-fourth less flying, or working bees in my apiary, at the close of the honey season than there were when I first put the scales under the hive on July 28, and three-fourths less brood.

I think that it is a great help to have a hive placed on a scale during the

honey season, for you can tell just what your bees are doing, and how fast you will have to get your sections ready to put on, how much more room they need, etc., from two to five days sooner than you would if you had no scales, and these few days would amount to several hundred pounds of honey for each day in an apiary of from 50 to 100 hives.

GEORGIA HONEY.

"Pleasantries" About the Production of Honey.

Written for the American Bee Journal

BY W. H. PRIOR.

An item on "Honey in Georgia," has been going the rounds of late through the secular press, and has been copied by some bee-papers. I also notice on page 460 of the AMERICAN BEE JOURNAL, the management of an apiary by Ben Foggy, of Iowa, who makes honey, according to his fancy, by "moonshine."

Now I cannot produce honey like Ben Foggy, or my Georgia neighbor who has a grove of trees which he taps and gets the honey by the barrel. Certainly the Iowa man, as well as my Georgia friend, were out of employment, and acting up the old adage, that when you tell one, tell a big one, they indulged their imaginary genius in fabricating these sweet pleasantries—like the "Wily scientific pleasantry" in fabrication, but unlike that pleasantry in that they were not intended for the purpose of, nor could in any way injure apiculture in the least.

But laying all jest and pleasantry aside, Georgia (especially middle Georgia) is as well adapted to apiculture and the production of honey, as any country in the world, Italy not excepted. Our climate is almost the counterpart of that salubrious climate so much admired by travelers, and so beautifully described by writers of both prose and poetry.

The cultivation of "king cotton" has so absorbed the minds and energies of the yeomanry of the Sunny South for several generations past, that they have neglected and almost ignored every other rural industry; and this has been to the detriment of themselves and families, and almost to the irreparable ruin of this Heavenly favored Sunny South land of ours, by making barren wastes and gapping gullies on almost every hillside.

Once these fields were as fertile (and the most of them are still capable of as high a state of cultivation) as any land North, East or West. This has been demonstrated and proved beyond a doubt, not only by special tests, but by numerous and extensive experiments. The people are awaking to their best interests, and diversified farming—the dairy and other industries—are springing up on every hand. Northern capital is fast seeking investment with us, opening up industries which of course will give us a better home market for our honey, butter, fruits, vegetables and the like. The want of a home market, and the lack of railroad facilities has been a great drawback in the production of these things. The opening of new lines of railway, a great deal of which has been done within the past few years, the reduction of freight, the preparation of refrigerator cars, etc., is working a revolution in this respect.

Middle Georgia as a Honey Country.

Middle Georgia is specially adapted to apiculture. Our winters are comparatively short and mild. The mercury rarely ever reaching zero. We hardly know what it is for it to go below zero, and the cold spells are generally of but short duration, there being scarcely a week during winter but that the bees can have a cleansing, sunny flight if they so desire.

We have no need of a cellar, house or even chaff hives; all that is needed for safe wintering is a good colony with enough honey to last them from November to March 1. By feeding the last of February and the first of March, for stimulating brood-rearing, one can have full colonies ready for work as early as from the first to the middle of April. My first swarm came out and was hived on Saturday, April 7. With empty frames to start with, in ten days they had the frames below filled with brood and honey, and were working in the upper sections.

Our honey harvest is during the months of April, May and June, although the bees can live by foraging from March to November. Thus it will be seen that we could save the cream of our honey harvest, and then sell and ship some colonies to the North in time for the beginning of the honey harvest there.

Honey-Yielding Plants of Georgia.

While I suppose we have nothing equal to the basswood of the North and Northwest, yet we have the great advantage of a greater length of time for the honey-flow, and a greater variety of honey-producing plants. Our poplar is almost as good as basswood. We have willow, besides other swamp growth and wild flowers that furnish the precious nectar. These come along in April and May. Apples, pears, plums and the like bloom in March. Later on we have the field pea—almost as good as red clover—being of the clover family a leguminous plant, which grows to perfection with but little labor, and is a fine stock feed, both pea and vine, besides the best renovator of worn soil, red clover not excepted.

Then red clover will also grow well here, if properly managed and fertilized. I have had it to grow from 2 to 3 feet high, and yield from 3 to 5 tons of good hay per acre. I shall sow more this fall than ever, and mix Alsike clover with it. Alsike is said to be better for bees than the red, and that Alsike will grow anywhere that the red will. I shall give it a trial anyway.

We have a little white clover that grows wild, to be found almost anywhere, that furnishes considerable honey during the month of June. Our cotton—and we have thousands of acres in full bloom from the middle of July to the middle of October—furnishes enough for the bees to live on during this time. It is very light in color, and finely flavored. The meagre supply scattered over so large a territory gives but little surplus, but enough to keep the bees from consuming their already garnered winter supply. If the second crop of Alsike and red clover blossoms should prove with us what is claimed for it in the North and Northwest, we can have a July crop of honey that would make our honey harvest last from April 1 to Aug. 1. I shall sow at least ten acres of the two mixed this fall, and give it a fair test.

There are but few apiarists in this country, but quite a number of bee-keepers using the old-fashioned box-gum, not knowing a queen from a king bee. Dr. J. P. H. Brown, of Augusta, Ga., one of the most noted apiarists of the South, has already taken, this season, 125 pounds of surplus honey from one Italian colony. Of course this is a phenomenal yield for one colony, but from 75 to 100 pounds have been frequently obtained in Georgia. Of course, with us as at the North, every year is not a honey year, but we never have an entire failure, always having some surplus.

With our natural advantages of climate, and many honey-producing plants, with practical and scientific knowledge of apiculture, producing artificial pasturage for bees, combining the business with stock husbandry—certainly Georgia could be made a land that would with "milk and honey flow."

Madison, Ga., Aug. 1, 1888.

IN COUNCIL.

The N. W. Illinois and S. W. Wisconsin Convention.

Written for the Forreston, Ills., Herald

BY THE SECRETARY.

The bee-keepers of Northwestern Illinois and Southwestern Wisconsin met by appointment at Leaf River, Ills., on Tuesday, Aug. 21, 1888, the President, L. Highbarger, in the chair.

It being a very busy season among the farmers, there was not a very large attendance. A few of the most prominent men of the association were present, and their able discussions made it a very pleasant meeting.

Some time was spent by the visitors in examining the methods and looking over the well-kept apiary of the President of the association, Mr. Highbarger. His colony of newly-imported bees elicited the admiration of all present, and the queens of this species will be at a premium among the members in the future.

Bee conventions are modern societies, and bee-culture is a modern science. Thirty years ago a bee-keepers' association was never thought of; to-day they are found in every progressive country of the globe. The person who will take the time to look over the records of the past thirty years, will

discover some of the benefits derived from these associations. No single individual has been able to discover all the intricacies concerning any one thing of the method of the bee. So the benefits of sociability and meeting with friends and neighbors, and the exchange of discoveries that have been made by the members are appreciated in this organization as well as in any other.

The questions for discussion before the society were:

1. "Which is more preferable for the bee-master, to supersede the old queen, or let the bees do it?" It was decided in favor of the master doing it.

2. "Can a queen that produces all three-banded bees be a hybrid?" Answer: No; by a letter read from the *Bee Journal*, by Frank Benton.

3. "Will mixed bees work better than bees all from one colony?"

4. "Do bees do better in hives faced in one direction than another?"

These questions were ably discussed by the members, after which the meeting adjourned, to be called in May, 1889.

SWARMING.

Do Bees Select a Habitation Before Swarming?

Written for the American Bee Journal

BY JAMES F. WOOD.

I have read the articles on the above subject with much interest, and as far as my observation has gone, I think that each writer has been partially right. I will give my experience with a few of the most striking cases that I have personally witnessed.

When a boy of about 16 years of age, I had a great desire to learn all I could concerning bees and their habits, and after reading and re-reading all the books until I knew them nearly by heart, I concluded to stock an apiary with Italian bees. Not having the funds to purchase bees, I set out to get my bees from the woods, and at that time there were many of my neighbors who kept bees, and many swarms escaped to the woods. Now for the facts:

A neighbor had a swarm that clustered where they could not be reached, and I was informed of this fact, and directly went to the place to watch the swarm and chase them to the tree when they left. I did not have to wait long before they started, and with some difficulty I managed to keep in sight of the bees until I saw them enter the tree about a mile distant. This was in 1875. The same year I followed the lines that several swarms had been known to have gone, but I never found but one more by following the direction they started from the hive.

But on this side of the question I have still the best evidence that I have yet seen printed. It occurred this season in a neighboring town. I went to purchase some bees of a friend, and while looking at the bees, a large swarm issued, and without alighting it went about 15 rods *directly* to an old hive, where a colony had died the winter before. This swarm did not fly around after it issued, but as soon as it got out, it went direct to this hive, and nearly half of them were in the hive when we went to it. But this by no means proves that bees "pick out" a home before leaving the parent hive. But it looks pretty clear that the last-mentioned swarm knew where they were going before leaving the hive; and that the first-mentioned swarm knew where they were going before leaving the limb where they had clustered.

I might add that the scouts sent out, and those that returned, seemed to nearly all go and come from the direction of this tree that the bees selected for their home. I noticed this to such an extent that I remarked to several that I was pretty sure the bees would go in that direction, as they afterward did.

One writer has said that bees sometimes will fly for days and keep alighting and searching for a home. This is true also, as I can testify. I knew a small swarm to issue and fly off about two miles before alighting. Here they hung for two days on a limb, and flew about a mile and alighted again. They kept flying around for a week in the neighborhood, and finally settled in a tree not 20 rods from where they started. This was late in the season (the latter part of August). This swarm was not kept in sight all the time, but owing to the fact that it is rare that swarms issue so late in this locality, the size of the swarm, and that it was seen by many people flying back and forth, I think there is little doubt that it was all one and the same swarm.

I have several times found swarms clustered miles away from where any bees were kept, and have several times chased swarms until they finally lighted on some tree or bush instead of going to a tree. My conclusion of the whole is this: Bees sometimes go direct to the new home without alighting, but not often; and that others will alight and then send out scouts; then, if successful, they will go direct to the new home. But the majority of swarms that escape, fly and alight several times before they find a home; and I have the best of reasons to believe that they often get ten, and even twenty, miles from the parent hive before they settle in their new home.

North Prescott, Mass.

RIGHTS OF BEES.

Have the Bees a Right to the Nectar of the Raspberries?

Written for the American Bee Journal

BY JAMES M'NEILL.

I have been a member of the Bee-Keepers' Union since its inception, and have paid my dues each year without any thought that I should be obliged to invoke the aid of the Union in the defense of my rights, as I had kept bees for a number of years without any serious complaint from my neighbors. But the situation is changed now at my out apiary, and one of my neighbors declares that it is his purpose to collect damage for the injury which our bees have done his raspberries.

Three years ago he set out about half an acre of raspberries of the red Antwerp variety. He made no serious complaint about the bees during the first two years; but the present season, toward the close of the raspberry harvest, a severe dry spell left the bees without any forage, and the same cause, I suppose, tended to ripen the berries faster than the owner could take care of them. The result was that the bees worked upon his raspberry patch, as he says; not only destroying his fruit, but stinging the pickers, so that many of them refused to pick, and he could not get pickers to take care of the fruit.

He claims that our bees have done him $150 worth of damage during the past three seasons. He made no serious complaint to me during the first two years, simply asking once in awhile, as I supposed in a half joking way, what we were going to pay him for bee-pasturage. Nor during the greater portion of his berry harvest this year did he make any complaint about the bees, though we passed by when he was picking every day. But meeting him on July 31, he declared that the bees had become an intolerable nuisance—that they were eating his berries up and driving his pickers away, and that even after the berries were in the baskets, they stuck at them and destroyed many.

We drove down the same day to look over the berry patch, and we found, as we supposed we should, that the berry season was about over, and great quantities of over-ripe and dried-up berries hanging on the bushes. Of course the bees were on them, but wasps and hornets were there as well. Certainly no one but those who had a senseless fear of bees, need have been afraid to go among the bushes, as a slight jar would cause the bees to fly away.

There were a couple of crates of berries standing at the ends of the rows, and the women of the household were crying out that the bees would eat them up if they were not taken away. We opened the crates, and found perhaps 6 to 10 bees in each basket; but a slight jar would cause them to fly harmlessly away.

We called upon a neighbor of this man who has berries of the same variety, to find out if the bees troubled his patch, and he made no complaint. He said if the berries were not allowed to get over-ripe, the bees were not troublesome, and if they were upon a bush, a slight jar would cause them to fly harmlessly away. On the other hand, the man who works the farm where our bees are, and who has a patch of the same kind of berries, said that while he had no cause for complaint last year, this year he found the bees very troublesome.

The fact in this man's case we knew was, that he had so much to do that he neglected his berries until they were over-ripe. When we told these men that if they picked their berries when they should be picked, they would have

no trouble with the bees, they replied that they had the right to pick their berries when they saw fit to do so. But it seems to me that they have not ethically such a complete control of their possessions against bees as they have against domestic stock.

If my cattle break down my fence and get into my neighbor's fields, I am justly liable for any damage that they may do, for it is my business to keep my fence in good repair. But bees cannot be thus restrained. They roam at will, and however much we would like to prevent them from visiting our neighbors' berries and fruit, we are powerless in the matter.

Now bee-keeping being a highly useful industry, its peculiarities should be recognized in the laws of the land. The greatest good to the greatest number should control here as elsewhere in society; and if the fruit-grower can be as exacting in his rights and privileges against bees as against other forms of trespass, the effect would be to drive bee-keepers out of the business.

The "greatest good to the greatest number" would not be conserved by such a policy, for it is even better for the community that the fruit-grower should suffer than that the industry of bee-keeping should be proscribed.

When the fruit-grower claims the right of planting anything that he likes, and gathering his crop whenever it suits his convenience, law should step in and say: that is your undoubted right to the extent that it does not conflict with the higher law of "the greatest good to the greatest number," but when it does so conflict, individual rights must give way to the best interest of the community. I am not posted in the law as regards this matter, but it seems to me that this is a common-sense view of it.

It is decidedly disagreeable to me to have any difficulty with my neighbor. I would much prefer to pay a reasonable claim for damages than to sustain a suit at law, but I forsee that if I recognize this man's claim for damages, I will have to recognize his neighbor's claims also, and if I pay damages this year, I may have to do the same for years to come, and with such a prospect before me, I should certainly be compelled to give up the business, for in its present status, it would not stand such a tax.

Hudson, N. Y.

[It is true that the bees and their keepers have rights, and it is equally true that the owners of surrounding lands have rights. To get at, and carry out to their legitimate result these rights all around, is the difficulty. As General Manager of the National Bee-Keepers' Union, we have advised Mr. McNeill as to what course to pursue, and we have no doubt that the whole affair will be amicably settled—at least we hope so.

The thoughtful reader will find much to interest him in the article from Dr. Miller, on page 583 of this issue, on this important subject.—ED.

EXTRACTED HONEY.

Its Purity, Granulation, Uses, and Production.

Written for the American Agriculturist

BY A. H. DUFF.

Extracted honey is coming into general favor. The fear of adulteration has been the great obstacle to its sale, but this is now largely dispelled, and people are taking hold of the article with more confidence. It is only necessary for consumers to consider a moment to convince themselves that at the present prices for which extracted honey is sold, it would be impossible to produce any substitute that would cost less. In earlier times, when honey would bring from 25 to 35 cents per pound, there was an inducement to adulterate; but when honey brings only 10 or 12 cents it is impossible to substitute any article with a salable appearance except at a cost that would not exceed the price. Every bee-keeper well knows that adulteration is a death blow to his own industry, and when adulteration was common, it was doubtless safe to lay the blame upon the middleman and not on the producer.

It has been asserted that adulteration is brought about by the bee-keeper feeding sugar and syrup to the bees. This is impossible, for the reason that sugar and syrup feeding will never produce honey. It will simply be sugar syrup stored in the combs, and will not be changed in flavor. The fact that bee-keepers feed sugar to their bees creates misapprehension among the inexperienced. It is of the utmost importance at certain seasons of the year to feed bees, but it is only to maintain life, or to stimulate brood-rearing, and it is done late in the fall and early in the spring.

The cost of feed brings this to an end as soon as the colony is in a fair condition. This feed is all consumed in the brood-nest, and not a particle of it ever reaches the surplus boxes. When honey is abundant in the flowers, and the bees have access to it, they cannot be led away by any cheap sugars or syrups. It would be folly to furnish food at a high rate, when honey-producing flowers are supplying the real nectar in excessive quantities.

Extracted honey can be secured in greater quantities than comb honey under the same conditions, and at a much less cost. The saving of comb is quite an item, for to produce wax involves the consumption of large quantities of honey. It has been estimated that 20 pounds of honey are sacrificed in producing one pound of wax or comb. The convenience of handling extracted honey, and the ease with which it can be kept any length of time in good condition, are greatly in its favor.

The granulation of extracted honey has heretofore interfered with its sale and use, but it is now pretty well understood that all pure honey will granulate, and in this condition it is preferred by many to the liquid form.

In extracting, the different varieties of honey produced from different blossoms can be kept separate, and the entire crop graded. Most people think there is but one kind of honey, and when they see two different colors they conclude one of them is not right. It is impossible to enumerate the different varieties, flavors and shades of honey, but we may safely say that in any one locality there may be twenty different kinds, at least as many as we have different genera of flowers.

All honey when taken from the hives should be stored away high and dry in buildings. Never use a cellar nor any damp place for this purpose. Dampness will spoil honey, but heat never will.

Creighton, Ohio.

COMB HONEY.

My Favorite Management, and How to Obtain It.

Written for the American Bee Journal

BY WESLEY DIBBLE.

I commenced using the new Heddon hive in 1886, which was considered a poor season here. I obtained more finished and marketable honey with it than with the hive I had used for 7 years previous, and I may add, more honey than any other bee-man with any hive in this territory produced, to my knowledge. I used it according to directions given by its inventor, which was a box on a single story. I, of course, was well pleased with the result the first summer.

I neglected to feed my bees in the fall, and put the bees into the cellar on Nov. 14, 1886, which were in the reversible and the Langstroth hives. The result on May 1, 1887, was that I had lost 50 colonies in the reversible hive, while those in the Langstroth wintered well.

I will say here that I had always wintered bees perfectly before, and the bees consumed so little honey that I did not see the necessity of feeding those in the reversible hives in the fall. The colonies in reversible hives went into the cellar very light, while those in Langstroth hives were heavy. In view of all of the above loss, I was not discouraged with the hive.

In 1887 I filled the hives again with bees, and used them mostly with both stories the second season. About June 1, 1887, I commenced to change the lower section or half-hive to the top, and the top one below. I practiced this once in seven or eight days, for four times, and some of them oftener. When the upper story was loaded with honey, I put it below as late as Aug. 1.

I did not get a natural swarm from the reversible hive in 1887. I put them into the cellar again on Nov. 19, 1887, with both chambers of the hives well filled with bees and honey. The bees wintered perfectly, and now, on July 27, 1888, with the same management as last summer, the colonies in these hives are ahead of anything I know of in this part of the country, in storing honey in sections; and I have had one swarm from 50 colonies.

About finding the queen: I am not telling what I can do, but what I have done. My wife and myself clipped the wings of 50 queens in reversible hives in less than two hours, in my home yard. I have another yard seven miles from here, with 73 colonies, spring count, and it required 1½ days to accomplish the clipping. The wings of the queens of both yards ought to have been clipped sooner, or before the hives were so full of bees; but I care but little about the quantity of bees with the reversible hive—I can find the queen 19 times in 20 almost instantly, while I have searched one hour for a queen in the other hives, and then shut them up till some other time, without finding her, especially a black queen.

Middleburgh, N. Y.

CONVENTION DIRECTORY.

1888 *Time and Place of Meeting.*

Sept. 6.—Bees and Poultry, at New Brunswick, Ind.
Ora Knowlton, Sec., New Brunswick, Ind.

Sept. 8.—Susquehanna County, at Montrose, Pa.
H. M. Seeley, Sec., Harford, Pa.

Oct. 3-5.—North American, at Columbus, O.
W. Z. Hutchinson, Sec., Flint, Mich.

Dec. —.—Michigan State, at Jackson, Mich.
H. D. Cutting, Sec., Clinton, Mich.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Bees Doing Well.—L. Highbarger, Leaf River, Ills., on Aug. 28, 1888, says:

Bees are doing well at present on asters and heart's-ease. If it so continues I expect to get some surplus honey besides my increase of bees. I increased my apiary from 18 colonies to 50.

Bees Making a Living.—M. O. Tuttle, Osage, Iowa, on Aug. 28, 1888, says:

Bees in this section are going to make a living for themselves, but not for their keepers, unless we rob them. During the last of June and all of July, there was just honey enough to stimulate swarming, but not enough to get any surplus. There will not be comb honey here to one-tenth part supply our home market. Perhaps we can get the people educated to use extracted honey, while they can get nothing else. Honey from buckwheat, golden-rod and other fall flowers is as plenty now as any time this season.

The Ignorant Bee-Keepers.—J. W. Tefft, Collamer, N. Y., writes:

That class of bee-keepers who do not take good bee-papers—who read no books on honey-bees—have no business with bees, as bees have no business with them. They abuse the profession. No argument can convince them. They are so habituated to intrigue and mystery, and are prone to accept a plain fact, but will dodge the road to common-sense. They will not pause to deliberate upon and minutely scrutinize divers errors committed, and opportunities neglected, whereby he would wish to account for the total failure of his enterprise. After they have lost there bees, and are "upset," they will whine, and say that it all happened because of other's business, and that the weather was very heavy; when in fact the waters were very deep, the night very dark, and the intellect very muddy. Such condemn reversible frames, not knowing what they are talking about.

The plain fact of the business is, all such cases are unfortunate. Bee-keeping can only be achieved by those who, like Dzierzon of old, "pay the costly price for the brilliant meed of honor," by discipline, self-control, and a boundless enthusiasm for the art.

Working on Heart's-Ease.—W. H. Martin, Falls City, Nebr., on Aug. 25, 1888, says:

We have had plenty of rain in this vicinity this summer, and bees are working on heart's-ease, which is abundant in nearly all stubble fields.

Make Our Cause Strong.—J. W. Winder, New Orleans, La., on Aug. 28, 1888, writes:

The honey crop is short again in this portion of the State. Too much rain has not been conducive to the usual yield, so dollars for the "Union" will be scarce from this source. But as our pursuit must be defended against ignorance and wrong, I send in my dollar, to help make our cause strong.

Wet Summer and Small Crop.—Wm. B. McCormick, Uniontown, Pa., on Aug. 28, 1888, writes:

I had my back badly strained some three weeks ago, by being thrown from a wagon. I am now able to walk about again, but I have not sufficient strength to attend to my bees. Our prospects for a good crop of honey in the spring were very bright, as the bees all came through the winter in prime condition, with abundance of honey. Fruit bloom, etc., was good, as well as the weather, and nearly all of my 40 colonies commenced working in the sections; but, alas, alas, our hopes were all blasted, for the white clover (our main and only source for surplus) was a perfect failure, and since July 1, our bees have scarcely made a living. My crop will amount to about 1,000 pounds of comb honey, most of it being dark, and the sections not very well filled. We have had a very wet summer.

Pleased with the Union's Success.—D. Millard, Mendon, Mich., on Aug. 25, 1888, writes:

I am much pleased with Z. A. Clark's success, and I sincerely hope that he will come out ahead in the final contest. I am, however, much opposed to keeping large apiaries in thickly settled corporations; for if they are not a great public nuisance, they are often a source of great annoyance to one's nearest neighbors—the very ones with whom we should sustain the most amicable relations. I joined the Union, and gave my first dollar to assist in squelching the absurd idea that bees ever annoyed sheep. My second dollar went to assist in proving that bees of themselves never destroy grapes. I now send another dollar hoping that it will aid in "pushing to the wall" any would-be scientific professor, clergyman, idiots, or those who will persist in villifying honey-producers. There is no more positive evidence of ignorance or dishonesty than to be persistently accusing others.

The season is a failure here with us. There is very little or no white clover, only a light bloom of linden, and the weather is too dry for buckwheat and fall bloom. I have no honey to sell, and but little increase.

Honey and Beeswax Market.

NEW YORK.

HONEY.—Market is bare of extracted, but choice white clover or basswood will bring from 7½@8c. Southern extracted, 55@60c. per gallon, as to quality.
BEESWAX.—Dull at 23c.
Aug. 23. HILDRETH BROS. & SEGELKEN, 28 & 30 W. Broadway, near Duane St.

SAN FRANCISCO.

HONEY.—White 1-lb. sections, 12@13c.; 2-lbs., 11 to 14 cts.; amber, 7@9c. Extracted, white, 5½@6c.; light amber, 5@5½c.; amber and candied, 4½@4½c. Receipts light and market firm for best qualities.
BEESWAX.—17@21c.
Aug. 25. O. B. SMITH & CO., 423 Front St.

DETROIT.

HONEY.—Best new white comb, 15@16c., with little in sight and slow sales. Market is low, and bee-keepers will do better to hold honey until approach of cold weather.
BEESWAX.—21@22c. Supply limited.
Aug. 22. M. H. HUNT, Bell Branch, Mich.

CHICAGO.

HONEY.—New crop offered at 16@17c., demand being very light yet. Extracted is not in much demand, and prices are nominal at 7@8c. for the best grades.
BEESWAX.—22c.
Aug. 14. R. A. BURNETT, 161 South Water St.

CHICAGO.

HONEY.—None here, and market in good condition for new crop. There is some demand for the extracted.
BEESWAX.—22c.
Aug. 2. S. T. FISH & CO., 189 S. Water St.

CINCINNATI.

HONEY.—We quote extracted at 5@8c. per lb., for which demand is fair. Comb honey, 12@15c. Some small lots have sold at 13@16c. Market quiet.
BEESWAX.—Demand is good—20@22c. per lb. for good to choice yellow, on arrival.
Aug. 24. C. F. MUTH & SON, Freeman & Central Av.

KANSAS CITY.

HONEY.—Choice 1-lb. sections, 18c.; dark 1-lbs., 14c.; 2-lbs., 13c.; dark, 13c. White extracted in 60-lb. cans, 8c.; amber, 7c.; in barrels and kegs, 5@6c. Demand good, prices firm, and stock light.
BEESWAX.—None in market.
Aug. 20. HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK.

HONEY.—The market is not yet established, and very little new honey has arrived. From the crop reports, prices will be as high, and perhaps may be somewhat higher than last year. Reliable quotations cannot be given yet, but there is good demand for extracted. We quote choice white clover and basswood extracted at 7½@8½c.
Aug. 29. F. G. STROHMEYER & CO., 122 Water St.

BOSTON

HONEY.—We quote: New 1-lb. sections, 18@20c.; 2-lbs., 14@16c. New extracted, 8@10c.
BEESWAX.—25 cts. per lb
Aug. 24. BLAKE & RIPLEY, 57 Chatham Street.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 5½ cents; light, 5¼c.; amber, 4½@5c. Comb, 1-lbs., 12@14c.; 2-lbs., 9@13c., as to quality. Arrivals not large, and supplies held firmly.
BEESWAX.—Dull at 19@22c.
Aug. 20. SCHACHT & LEMCKE, 122-124 Davis St.

KANSAS CITY.

HONEY.—We quote: White 1-lbs., unglassed, 18 to 20 cts.; 2-lbs., 15@16c. California white 1-lbs., 18c.; 2-lbs., 15c.; extracted, white, 8c.—amber, 7c.
BEESWAX.—None on the market.
Aug. 10. CLEMONS, CLOON & CO., cor 4th & Walnut.

ST. LOUIS.

HONEY.—We quote: Extracted, dark, 4@4½c.; bright, 5@5½c.; in cans, 7@8c. Comb, white clover in prime condition, 13½@15c.; dark, 11½@12½ cts.—Market quiet, demand good and receipts light.
BEESWAX.—22c. for prime.
Aug. 10. D. G. TUTT & CO., Commercial St.

MILWAUKEE.

HONEY.—New white 1-lb. sections 18c., and very fine, 20c.; 1-lbs. 15@18c.; old 2 and 3 lbs., not salable, 12½@14c.; dark 1-lbs., old or new, 12@13c. Extracted, new white in kegs and ½-barrels, 8@9c.; old, in same packages, 7@8c.; in tin, 8@9c.; dark in barrels or ½-barrels, 6@6½c. Arrivals of new crop small; demand not urgent, and only very moderate trade.
BEESWAX.—22@25c.
Aug. 31. A. V. BISHOP, 142 W. Water S.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

If You Live near one post-office and get your mail at another, be sure to give the address that we have on our list.

Hilton's new pamphlet on Comb Honey Production has been reduced in price to 5 cents. For sale at this office.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

Paper Boxes—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections 4¼x4¼ and 5¼x5¼. Price, $1.00 per 100, or $8.50 per 1,000.

Preserve Your Papers for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Yucca Brushes, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Please write *American Bee Journal* on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Pure Phenol for Foul Brood.—Calvert's No. 1 phenol, mentioned in Cheshire's pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must be sent by express.

Apiary Register.—All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and begin to use it. The prices are as follows:

For 50 colonies (120 pages)	$1 00
" 100 colonies (220 pages)	1 25
" 200 colonies (420 pages)	1 50

Photographs of Bee-Keepers.—The "medley" gotten up by E. O. Tuttle, containing the faces of 131 representative apiarists, and a printed sketch of each one, will be sent with the BEE JOURNAL for one year for $1.75; or we will present it *free*, by mail, to any one, for a club of three subscribers and $3.00.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	Club
The American Bee Journal	1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Magazine	1 50	1 40
Bee-Keepers' Guide	1 50	1 40
Bee-Keepers' Review	1 50	1 40
The Apiculturist	1 75	1 60
Canadian Bee Journal	2 00	1 80
Canadian Honey Producer	1 40	1 30
The 8 above-named papers	5 65	5 00
and Cook's Manual	2 25	2 00
Bees and Honey (Newman)	2 00	1 75
Binder for Am. Bee Journal	1 60	1 50
Dzierzon's Bee-Book (cloth)	3 00	2 00
Root's A B C of Bee-Culture	2 25	2 10
Farmer's Account Book	4 00	2 20
Western World Guide	1 50	1 30
Heddon's book, "Success,"	1 50	1 40
A Year Among the Bees	1 75	1 50
Convention Hand-Book	1 50	1 30
Weekly Inter-Ocean	2 00	1 75
Iowa Homestead	2 00	1 90
How to Propagate Fruit	1 50	1 25
History of National Society	1 50	1 25

Hastings' Perfection Feeder.—This Feeder (illustrated) will hold 2 quarts, and the letting down of the feed is regulated

by a thumb-screw. The cap screws securely on. It is easy to regulate—either a spoonful or a quart—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for $3.50, and it can be obtained at this office. Postage 10 cents extra.

Cork for Winter Packing.—Its advantages are that it never becomes *musty*, and it is *odorless*. Cushions can be made of cloth and filled with the cork, for winter packing. We can supply all orders now at 10 cents per pound. Or a seamless sack of it, containing 15 pounds, for $1.00.

Please to get your Neighbor, who keeps bees, to also take the AMERICAN BEE JOURNAL. It is now SO CHEAP that no one can afford to do without it.

Can You Do Anything that will do more to advance and defend the pursuit of bee-keeping, than to aid its Weekly Exponent and Defender? The AMERICAN BEE JOURNAL is the pioneer bee-paper of America, and is fully entitled to the active support of every progressive apiarist, for it works constantly and faithfully for the best interests of the pursuit. We therefore specially request all our readers to use their influence to double our subscription list during the coming autumn. Reader, will you please send us a new subscription with your renewal or before that time? A good weekly at one dollar a year is surely cheap enough to command patronage.

Red Labels for Pails.—We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, $1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels	$1.50	$2.00	$2.25
500 Labels	2.00	3.00	3.50
1,000 Labels	3.00	4.00	5.00

☞ Samples mailed free, upon application.

Clover Seeds.—We are selling *Alsike Clover Seed* at the following prices: $8.00 per bushel; $2.25 per peck; 25 cents per lb. *White Clover Seed:* $10.00 per bushel; $2.75 per peck; 30 cents per lb. *Sweet, or Melilot, Clover Seed:* $6.00 per bushel; $1.75 per peck: 20 cents per lb.—by express or freight.

Exchange.—We will accept Honey and Beeswax in exchange for Bee-Keepers' Supplies in any quantity. Those desiring to make a trade are invited to correspond with us, stating quantity, quality, and price, and the goods they want in exchange.

Alfalfa Clover.—For habits and cultivation of this honey-plant, see page 245. We supply the seed at the following prices:—Per lb., 22c.; per peck, $3.00; per half-bushel, $5.50; per bushel of 60 lb., $10.00. If wanted by mail, add 10 cents per pound for bag and postage.

We Supply Chapman Honey-Plant **SEED** at the following prices: One ounce, 40 cents; 4 ounces, $1; ¼ pound, $1.75; 1 pound, $3. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

The Convention.—The pamphlet containing the report of the proceedings of the Union Convention in Chicago, Ills., is published, and can be obtained at this office for 25 cents. Or bound up with the history of the International Society, and a full report of the Detroit and Indianapolis conventions, for 50 cents, postpaid.

Convention Notices.

☞ The Darke County Bee-Keepers' Society will hold a basket meeting on the Greenville Fair Grounds, on Friday, Sept. 7, 1888.
J. A. ROE, *Sec.*

☞ The North American Bee-Keepers' Society will meet at Columbus, O., on Wednesday, October 3, 1888, and continue as usual in session for three days. W. Z. HUTCHINSON, *Sec.*

☞ The next semi-annual meeting of the Joint Bee and Poultry Keepers' Association of Boone and Hendricks counties will be held at the apiary of Wm. H. Higgins, 2½ miles south of east from New Brunswick, Ind., on Thursday, Sept. 6, 1888. All interested are cordially invited to attend.
ORA KNOWLTON, *Sec.*

☞ The Susquehanna County Bee-Keepers' Association will meet in the Court House at Montrose, Pa., on Saturday, Sept. 8, 1888, at 10 a.m., Sharp. The following subjects will be considered: Preparing Bees for winter; Preparing for, and Marketing, Surplus Honey; Does the Raising of Small Fruit Conflict with Bee-Keeping? All bee-keepers are cordially invited to attend. H. M. SEELEY, *Sec.*

We will Present a Pocket Dictionary for two subscribers with $2.00. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

Advertisements.

LANGSTROTH FUND.

A **GOOD** full-length PHOTOGRAPH of Rev. L. L. Langstroth, mounted on cabinet card, will be sent to any address for **50 cts**—one-half to go to the "Langstroth Fund." Address,
THOMAS B. REYNOLDS,
36A2t Box 356, DAYTON, OHIO.
Mention the American Bee Journal.

BEES FOR SALE.—24 COLONIES in improved movable-frame hives. For terms and particulars, write to
REV. J. D. GEHRING,
36A2t PARKVILLE, Platte Co., MO.
Mention the American Bee Journal.

TESTED GOLDEN ITALIAN QUEENS.

ONE Queen, $1.00; 2 Queens, $1.80; three Queens, $2.60; one-half dozen, $3.00. By **Return Mail.** **HENRY ALLEY,**
36A3t WENHAM, MASS.
Mention the American Bee Journal.

GREAT BARGAIN!

ONLY **$2.50 per Colony**—10-frame hives. For particulars address,
36A1t **J. J. ROE, Buchanan, Mich.**
Mention the American Bee Journal.

HONEY.

WE advise Bee-Keepers not to sell before getting our high prices.
State quality, quantity and style of packages; send samples of **Extracted,** with the sender's name marked on the same.
F. G. STROHMEYER & CO.,
36A4t 122 Water St., NEW YORK, N. Y.
Mention the American Bee Journal.

We have some **ELEGANT RIBBON BADGES,** having a rosette and gold Bee, for bee-keepers' use at Fairs, Conventions, etc. Price 50 cents each, by mail, postpaid.
THOS. G. NEWMAN & SON,
923 & 925 West Madison-Street, - CHICAGO, ILLS.
Mention the American Bee Journal.

CARNIOLAN

Gentlest bees known; not surpassed as workers even by the wicked races.
Imported Queens, "A" grade, $6.00, Tested, $4.00; Untested, $1.00,

QUEENS.

One-half dozen $5 00
Never saw foul brood. Cash always required before filling an order.
S. W. MORRISON, M. D.,
14Htf. Oxford, Chester Co., Pa.

The Original
BINGHAM
Bee Smoker

Patented, 1878.

ADDISON, Vt.—Have one of your smokers good yet—used 6 years. E. J. SMITH.
ELM GROVE, Mass.—Have one I have used six seasons—good yet. F. M. TAINTOR.
BORODINO, N. Y., Aug. 15, 1882.—All summer long it has been "which and t'other" with me and the Cyprian colony of bees I have—but at last I am done—Bingham's Conqueror Smoker did it. If you want lots of smoke just at the right time, get a Conqueror Smoker of Bingham. G. M. DOOLITTLE.

Bingham & Hetherington Uncapping Knife.

Patented May 20, 1879.

BINGHAM SMOKERS and KNIVES have Revolutionized the Smoker and Knife Trade, and have made bee-keeping a pleasure and a success. They are the only **lasting** and **satisfactory** Smokers and Knives now used by experienced bee-keepers in Europe, Australia, Cuba, and America. They are covered by patents, and while they are always the **best** that can be made, they are also the **lowest priced.**

Prices, by mail, post-paid.

Doctor smoker (wide shield)	3½ inch	$2 00
Conqueror smoker (wide shield)	3 "	1 75
Large smoker (wide shield)	2½ "	1 50
Extra smoker (wide shield)	2 "	1 25
Plain smoker	2 "	1 00
Little Wonder smoker	1½ "	65
Bingham & Hetherington Honey Knife,		1 15

TO SELL AGAIN, apply for dozen or half-dozen rates. Address,
BINGHAM & HETHERINGTON,
5Atf **ABRONIA, MICH.**
Mention the American Bee Journal.

BEE-KEEPERS' GUIDE;

EVERY Farmer and Bee-Keeper should have it. The
15th 1,000, Wholly Revised!
MUCH ENLARGED!
Contains many more beautiful Illustrations and is *up to date.* It is both PRACTICAL and SCIENTIFIC.
Prices: By mail, $1.50. To dealers, $1.00. In 100 lots, by freight, 50 per cent. off.
Address,
A. J. COOK,
35Atf **Agricultural College, Mich.**
Mention the American Bee Journal.

JUST PUBLISHED,
"PRACTICAL TURKEY RAISING"
By Fanny Field. This book tells all about turkey raising, from the setting of the eggs to the maturity of the young turks. If you follow the directions in this book you need not lose a bird. Fanny Field has had more experience and succeeds better in raising turkeys than any other person in America. She clears hundreds of dollars yearly on them, and will tell you how she does it. Price, 25 cents. Stamps taken. Address R. B. MITCHELL, Publisher, 69 Dearborn St., Chicago, Ill.
51C2t
Mention the American Bee Journal.

BEE-KEEPERS' SUPPLIES.

HIVES, Sections, Foundation, Smokers, Frames, Crates, &c., furnished at greatly reduced rates. Also **ITALIAN BEES** and **QUEENS** at very low prices. Send for my Catalogue. Address,
A. F. STAUFFER,
29Ctf STERLING, ILLINOIS.
Mention the American Bee Journal.

Friends, if you are in any way interested in

BEES OR HONEY

We will with pleasure send a sample copy of the **Semi-Monthly Gleanings in Bee-Culture,** with a descriptive price-list of the latest improvements in **Hives, Honey Extractors, Comb Foundation, Section Honey Boxes,** all books and journals, and **everything** pertaining to Bee Culture. *Nothing Patented.* Simply send your address *written plainly,* to
A. I. ROOT, Medina, Ohio.
Mention the American Bee Journal.

HEAD-QUARTERS IN THE SOUTH.

FACTORY OF
BEE HIVES, &C.
Early Nuclei & Italian Queens.
☞ Tenth annual Catalogue now ready.
5Ctf **PAUL L. VIALLON,** Bayou Goula, La.
Mention the American Bee Journal.

Barnes' Foot-Power Machinery.

Read what J. I. PARENT, of CHARLTON, N. Y., says—"We cut with one of your Combined Machines, last winter 50 chaff hives with 7-in. cap, 100 honey-racks, 500 broad frames, 2,000 honey-boxes and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-List Free. Address, W. F. & JOHN BARNES,
45Ctf No. 484 Ruby St., Rockford, Ill.
Mention the American Bee Journal.

EXTRACTED HONEY.

WE are buying **WHITE EXTRACTED HONEY.** Those having any for sale, are invited to correspond with us, stating the quality, flavor and price.
THOS. G. NEWMAN & SON,
923 & 925 West Madison-Street, - CHICAGO, ILLS.

SELECTED **Tested Breeding Queens,** only $1.00 by return mail; 2-frame Nuclei with same Queens, $2.50 each—two for $4.00. Also **HIVES** for sale **cheap.** Address at once, **S. F. REED,**
36A1t NORTH DORCHESTER, N. H.
Mention the American Bee Journal.